

Title (en)
Layered coating for erosion protection

Title (de)
Lagenbeschichtung zum Erosionsschutz

Title (fr)
Couche stratifiée pour la protection contre l'érosion

Publication
EP 2256228 A3 20110105 (EN)

Application
EP 10158900 A 20100331

Priority
US 47287109 A 20090527

Abstract (en)
[origin: EP2256228A2] A coating for protecting a surface (11) against erosion when contacted by particles having a range of particle sizes or by high velocity fluid impingement includes a first coating (17) on the surface forming a high bulk or composite hardness coating; and a hard ceramic coating (19) on the first coating having a hardness higher than the hardness of the first coating and the erosion particles.

IPC 8 full level
C23C 4/12 (2006.01); **C23C 28/00** (2006.01); **C23C 28/04** (2006.01)

CPC (source: EP US)
C23C 4/12 (2013.01 - EP US); **C23C 24/04** (2013.01 - EP US); **C23C 28/324** (2013.01 - EP US); **C23C 28/34** (2013.01 - EP US); **C23C 28/341** (2013.01 - EP US); **C23C 28/343** (2013.01 - EP US); **Y10T 428/24983** (2015.01 - EP US)

Citation (search report)

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- [X] EP 0526670 A1 19930210 - UNION CARBIDE COATINGS SERVICE [US]
- [X] DE 102004032342 A1 20060202 - FEDERAL MOGUL BURSCHIED GMBH [DE]
- [X] UTSUMI ET AL: "Effect of a hard supra-thick interlayer on adhesion of DLC film prepared with PBIID process", NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH, SECTION - B:BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol. 257, no. 1-2, 1 April 2007 (2007-04-01), ELSEVIER, AMSTERDAM, NL, pages 706 - 709, XP022014801, ISSN: 0168-583X, DOI: 10.1016/J.NIMB.2007.01.127
- [A] SHANOV V ET AL: "CVD diamond coating for erosion protection at elevated temperatures", JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, vol. 11, no. 2, April 2002 (2002-04-01), ASM INTERNATIONAL, US, pages 220 - 225, XP002607210, DOI: 10.1361/105994902770344303

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Designated contracting state (EPC)
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